

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

OFFICE CORRESPONDENCE

DATE: March 9, 2010

TO: WPC Files

FROM: Woody Smith

RE: Robert Watson Dairy Farm
Complaint Investigation
Loudon County

On March 8, 2010, Hassan Sanaat and I went to the above farm in response to a complaint from neighbors that cow manure was being pumped out of a lagoon and discharged.

We looked at the lower lagoon. There was no evidence of an overflow or pumped discharge. There was considerable freeboard and the soil around the top half was relatively dry indicating it had not been wet for a least a few days. The manure is managed by pumping from the lower lagoon into a fixed pipe up into another manure lagoon. There was some minor leakage around this pipe inlet and Mr. Watson said he needed to get the cap put back on that pipe. It was not the cause of the reported discolored water problem. The second lagoon sat at a higher elevation and also had considerable freeboard and the sides were also relatively dry indicating at least a few days to dry. Here is a photograph of the second, upper lagoon:



Mr. Watson pumps directly to his fields from the upper lagoon. During the previous week or so the line broke for a few minutes but not apparently long enough to create a discharge to surface waters.

I then began walking up the unnamed tributary or ditch which emerges on the main road in front of Mr. Watson's farm. There was no discharge taking place and the concrete at the mouth of this tributary appeared to be relatively dry and clean. I followed it and noted pools of discolored and/or foamy water.



Continuing on I had to go around a fenced area and then I went around a field where the tributary was visible. Here is a broad view of the area:



I picked up the trail of the tributary upstream (right side of picture) and continued to see pooled discolored and or foamy water, and the odor increased. Here is a another pool:



I finally reached the farm pond, which was meant to be clean water and had a small boat or canoe. However, it was clearly contaminated, as shown, with scum, a strong odor, a dark color, and pools of dark water nearby:



I continued following the dark water upstream and saw that it lead to piles of silage which were covered in tarps with old tires holding them down:





The source of the discolored water was found to be leaching water from these piles of corn silage. The odor at this location was similar to that found at a corn processing plant. Mr. Watson said the recent long spell of rainy weather has made it hard to keep this material from becoming wet and producing this fluid.